

Notice of Allowability

Application No.

09/805,896

Examiner

William D. Thomson

Applicant(s)

BECKER, JUERGEN

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/15/2001.
2. ☒ The allowed claim(s) is/are 1 and 2.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 51204.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

W. Thomson
Art 2123
Primary Examiner
Part of Paper No./Mail Date 5120

DETAILED ACTION and ALLOWANCE

1. Claims 1 and 2 have been examined and allowed.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed and applicants have been afforded a priority date of March 15, 2000.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on March 15, 2001 has been considered by the examiner. Further, since the IDS included the German language version of the document, the Examiner uncovered U.S. Patent 6,416,017 issued on July 9, 2002 that corresponds to DE 198 41632, the only reference cited in the IDS. This was used as a complete translation of the document for purposes of reviewing the reference for its relevance to the instant claimed invention.

Drawings

4. Formal drawings are required in this application because the Applicant filed the instant case with hand drawn informal drawings that were useful for examining but are not acceptable for printing. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The formal drawings are required in reply to the Notice of Allowance to avoid abandonment of the application.

Reasons for Allowance

5 The following is an examiner's statement of reasons for allowance:

6. The prior art of record does not expressly teach or render obvious the claimed invention as recited in the methodology of claim 1. Specifically the allowable subject matter resides in the limitations, as recited in the context of claim 1, directed to the process for designing a flight controller by determining a damping and phase delay for each excitation frequency first for a rigid airplane and then for an elastic airplane including adapting the flight controller such that structural responses to each excitation frequency for both the rigid airplane and the elastic airplane in an open control circuit outside of two design fields, applicable to the elastic airplane are located around instability points in a data field comprising the damping and phase delay where the design of the elastic airplane allows damping exceeding -6 db between the phase delays of -270 degrees and -495 degrees. The phrase "the design of the elastic airplane " including "the design of" has been interpreted as not having improper antecedence since this is inferentially referring to the prior elastic airplane that is clearly a within the design and for the design of the flight control, inclusive of this elastic airplane. The phrase "adapting the flight controller such that" has been interpreted as using known design tools by persons of ordinary skill level to provide modifications or adaptations to the flight controller to accommodate for structural responses to excitation frequencies for both rigid and elastic airplanes, based upon the limitations that follow. The term "acts" has been interpreted as "steps". While the language of claims does not

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flow well, one of ordinary skill level would, in light of the teachings of the specification, should understand the metes and bounds of the claims.

Though the prior art of record expressly teaches the use of both rigid and elastic airplane modeling/designs for flight controls, the prior art does not explicitly teach the exacting steps with bounded ranges as recited in the independent claim 1. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. In *re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). The general concepts are taught and known throughout the prior art, however, the combined acts of the designing a flight controller having the design of the elastic airplane allows damping exceeding -6 db between the phase delays of -270 degrees and -495 degrees, was not uncovered.

Motivation to combine the teachings of the prior art, including that which would have been known to one with an ordinary level of skill in this art, was not uncovered so as to render the claimed invention obvious.

Dependent claim 2 is allowable as they depend on an allowed independent claims.

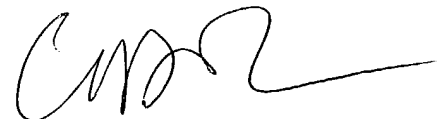
Conclusion

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William D. Thomson whose telephone number is 703-305-0022. The examiner can normally be reached on 8:30-3:30 Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska can be reached on 703-305-9704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William Thomson
Primary Examiner
A.U. 2123
June 13, 2004